GUIDE 98/99 Advertising Traffic and Billing Requirements Specification v.7

1.0 Introduction and Overview

The objective of this document is to provide an overview of the Ad Sales Process as we have identified, as well as outline the fundamental requirements of the Traffic and Billing system for use in assisting in the design.

An outline of the topics discussed follows:

- Overview of the Ad Space Essentials
  - Guide Screens
  - Guide Ad Page
  - Ad types
  - Slot Numbers
  - Rotation Numbers
- Time Slots
  - Time Slot/Day Part Packages
- Ad Sales Flow Process
- T & B System Requirements
  - Setting Accounts and Contracts
  - Creating an Avail Inventory
  - Building Schedules
  - Reconciling Procedure
  - Billing Activities
    - Affidavits
    - Invoices
    - Accounts Receivable Records
  - Analysis
    - Management Reporting
- Utilities
  - Setting Up Operators
  - Security
- Proposed T & B User Interface

Additionally, there are three appendixes included at the end of this document. . Appendix B is a general mapping of broadcast dayparts to our initial Guide Plus+ advertising avail dayparts. Appendix C is a glossary of terms used in this document.

In order to fully understand the overall Traffic and Billing system requirements, it is important to first understand the essential ad components of Guide Plus+ ads, as well as the sales process.

1.2 Ad Space Essentials

In order to support ads, it is necessary to design a traffic and billing system which will allow ad orders to be taken, an ad inventory to be created, ads to be scheduled, ads to be distributed and displayed, schedules verified, and invoices rendered.

Because our product is unique as an interactive medium (web-like banner ad look), but located in a familiar spot (on TV), our goal is to design a system that will emulate a broadcasting spot market by using familiar terms and concepts. However, hardware and firmware limitations are in conflict with this goal, as they prevent a more "TV like" advertisement (e.g., full motion video spots).

1.3 Guide Plus+ Advertisement Avail Definition

An ad avail is defined as Date+ space+ timeslot.

1.3.1 Date Defined

The Date is defined as the actual calendar date and day of the week. This is important for advanced orders (early season premier orders) as well as long-term purchases requesting only specific days of the week (e.g. M-F only). The broadcast "day" actually begins with the first time slot (illustrated in Appendix B at the end of this document) which for our purposes begins at 5:45 AM. Therefore, if an advertiser is interested in purchasing an ad to run at 4:00 AM, they are actually purchasing time during the previous calendar day.

1.3.2 Space Defined

Space has five different components. In hierarchy order, they are Guide Screen, Page Number, Ad Type, Slot Number and Rotation Number.

1.3.2.1 Guide Screen

Guide Plus+ has a number of different screens that can be accessed using the navigational bar at the top of the Guide. Immediately upon entering the Guide (by pressing the Guide button on the remote control), the user enters the Grid Guide Screen. Others screens that can be accessed and which will include advertising will include the Schedule display screens, First Level Sort screen, Second Level Sort screens, the Messages Screen, and the Channel Editor Screens. Future services (such as NewsGuide) will also include ad spaces. Because each of these screens may display different ads, it is important that the T & B system support this concept. Initially, however, the system will only need to support a single screen.

Guide Screens List:
- Main Grid Guide
- First Level Sort
- Second Level Sort
- Schedule Display Screen
- Messages Display Screen
- Channel Editor Screen
- Future: Other Services (such as News, Weather, etc. could be added)

1.3.2.2 Guide Page Number

Most of the screens also have multiple pages. When a user scrolls up or down, they will automatically change pages. It is assumed that most Grid Guides will initially have approximately ~80 channels, and with 9 channels per page, the average user will have as many as ~9 pages for their grid alone. Also, depending on their Sort selections, they may page through many, many movie pages. The T & B system must support the concept of multiple pages within each guide screen. Initially, however, we will begin with just one ad per space for all pages.

Guide Page Number List:
- Main Grid Guide will have an average of approximately 9 pages down and up to 48 pages across (to view the complete 2 day schedule)
- First Level Sort will have as many pages as there are sort categories. For example, we currently have three first level sort categories: Sports, Movies and Children's. In the future, we may add News or other sort categories, offering more pages.

- Second Level Sort will have as many pages as there are second level category search results. For example, if I select Movies as the first level sort, and Drama as the second level sort, I could have several pages depending on the results of that sort. There are 8 listed on each page, so the average number of pages at this level will likely be 3.
- Schedule Display Screen will have as many pages as needed to represent the individual users personal schedule. Initially, it is anticipated that we will only use the first page of this.
- Messages Screen will initially have only have one page. In the future, we may expand our use of the Messaging function and would want to also add to the number of pages capable of displaying ads.
- Channel Editor Screen will have one page.
- Other Future Services will have varying numbers of pages depending on the configuration of the services and our advertising objectives.

1.3.2.3 Ad types
Currently we've created two different interactive ad types: Panel Ads and Channel Ads.
> **1.3.2.3.1 Panel Ads** – Ads that are located to the left of the Guide pages which display both bitmap graphics as well as text.
> **1.3.2.3.2 Channel Ads** – Ads that are located within the Grid section of the Guide (as well as other like areas) that can display logos as well as text.

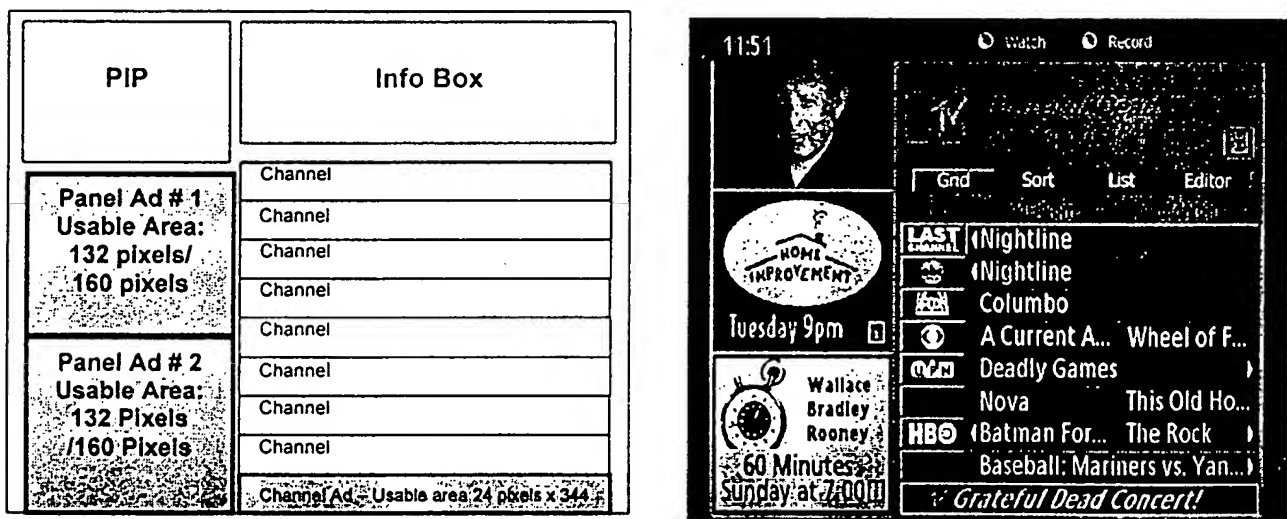Location and sizes of these ads are illustrated in Figure 1 below:

Figure 1: Sample Ad Types

Both types of ads perform the interactive functions of "opening" and displaying additional ad information as well as provide the ability to immediately tune to, record or schedule to watch the show linked to the ad. Channel Ads open automatically when you scroll onto them, but panel ads require a push of the "info" button on the remote to open them. Channel ads display an info box first, and with the push of the "info" button on the remote, display an expanded info box. Panel ads display the expanded info box and collapse down to the info box when the "info" button is pressed the second time (if there is only one expanded info box as a part of the ad).

Full descriptions of ad sizes, functionality and limitations are extensively outlined in the following Gemstar Documents: The Guide Plus+ '98 Advertising Specification as well as the Graphic Object Maker Specification.

1.3.2.4 Ad Slot Number
> 1.3.2.4.1 Panel Ads will have three slots:

- Slot 1: The upper panel ad occupying the space just below the PIP.
- Slot 2: The lower panel ad occupying the space just below slot 1.
- Slot 3: Combining both slots 1 & 2 and using the entire panel ad space for a single ad.

1.3.2.4.2 Channel Ads will have nine slots:

- Slots 1 – 9 will coincide with channel slots 1 – 9 within the grid on each page.

1.3.2.4.3 Parent Channel Ads

We have developed the concept of Parent Channel ads, which are ads that link to a particular channel within the grid. For example, if NBC wants to purchase a channel ad for Friends and locate the ad adjacent to the NBC affiliate in the Grid Guide, we will call the NBC Channel the Parent to be linked. To eliminate the possibility of multiple parent ads within the same time slot (potentially creating more than 2 channel ads per page), we will restrict the number one.

1.3.2.4.4 PIP vs. Non-PIP Guide Plus versions

PIP Guides have nine channel slots for each page, while non-PIP VCR guides have only five slots per page.

1.3.2.5 Ad Rotation Number

Panel Ad space can have a number of **rotations**. The firmware will store ads to be displayed in equal (or weighted) sequence for each new Guide "session". That means that when a viewer accesses the Guide during an ad time slot, they will see ad A displayed. If they page down or exit the guide, then re-enter and begin another "session", they will view a different ad (e.g. ad B) for the same space during the same time slot. For simplicity sake, we will begin our ad venture with 4 ad rotations (A, B, C and D) for each Panel Ad space. Channel ads will not have rotations.

There are separate rotation queues for all screens and all pages. Therefore, even by limiting the rotations initially to just four, the ads A, B C and D may be in different positions at any given point during an individual's guide usage session.

1.3.3   Time Slots and Packages

Along with the physical space that an ad will occupy, the other aspect of an ad avail that has been defined is the time slot. At the beginning, we intend to have 14 timeslots of varying lengths closely mirroring many of the standard broadcast day-parts. These 14 timeslots are outlined in the following table (table 1):

Daypart Timeslots	Time(s) of Day	Total Hours	Time slices Included*
Early Morning	5:45 AM – 8:44:59 AM	3 hours	1 – 6
Morning	8:45 AM – 11:44:59 AM	3 hours	7 – 12
Daytime	11:45 AM – 4:14:59 PM	4.5 hours	13 – 21
Early Fringe	4:15 PM – 6:44:59 PM	2.5 hours	22 – 26
Access	6:45 PM – 7:44:59 PM	1 hour	27 – 28
Prime 1	7:45 PM – 8:14:59 PM	.5 hour	29
Prime 2	8:15 PM – 8:44:59 PM	.5 hour	30
Prime 3	8:45 PM – 9:14:59 PM	.5 hour	31
Prime 4	9:15 PM – 9:44:59 PM	.5 hour	32
Prime 5	9:45 PM – 10:14:59 PM	.5 hour	33
Prime 6	10:15 PM – 10:44:59 PM	.5 hour	34
Prime 7	10:45 PM – 11:14:59 PM	.5 hour	35
Late Fringe	11:15 PM – 1:44 AM	3 hours	36 - 40
Overnight	1:45 AM – 5:44:59 AM	4 hours	41 – 48

* Time slices are more clearly defined in appendix B at the end of this document

Table 1: Guide Plus+ Avail Daypart Timeslots

We expect that as our inventory needs increase, we will slice these packages even further. It is possible that within the future, we will also want to increase the gross number of time slots (i.e. 5 minute time slots each hour of the day which combined will mean 288 time slots for one 24 hour period).

1.3.4   Ad Pricing

Each of the aspects described above (day of week, spot rotation, screen selection, page selection) will determine pricing for each ad purchase. Additionally, we will want to support the concept of charging differently for ads that are memory intensive versus ads that are less memory intensive.

> 1.3.4.1   Additional pricing components
>
> 1.3.4.2   **Time Rate:** As described above, we will begin with 14 time slot avail windows. It is expected that initially, the rate for these may all be the same. We will require, however, the flexibility in the T & B system to allow time slot pricing to be changed to allow charging a premium rate for slots in higher demand (e.g., Prime 1 – 6) and allow providing a discount for slots that may otherwise be unsold (e.g., Overnight).
>
> 1.3.4.3   **Space Rate:** Initially, both the upper and lower panel ads will be charged the same rate. We may find through research that one or the other is accessed more often resulting in our desire to place a premium on the space. The T & B system must allow this flexibility.
>
> 1.3.4.4   **Ad Size:** It is anticipated that we may want to charge 2X for a double panel ad initially. The T & B system must allow the ability to charge a premium for this space, or a % discount if both are purchased based on results gleaned following initial ad trials.

2.0   Overview of Sales Process

2.1   The Ad Sales, Creation, Distribution (scheduling and traffic) and Billing processes are outlined in figure 2 .

2.2 Overview of the Sales Order Flow Process

When the Guide Ad Sales department receives an **order** (or contract) for advertising, the Traffic and Billing Clerk will create an account and enter the order information into the T & B System. The system must then create a **confirmation** of the contract to be returned to the Advertiser for approval. The clerk will send an order to the Graphics Department to **create the ad**, and use the same Ad Creative ID when creating the weekly **advertiser schedule**. A graphics artist (either in-house or within the Graphics Department of the Agency or Advertiser) will use GOMaker to paste-up an ad to be reviewed and approved by the Advertiser. Once approved, the ad will be forwarded to a T & B clerk who will match it up with the advertiser's schedule and the Ad Creative ID. Simultaneously, the T & B clerk will create and forward a schedule (weekly through the duration of the ad order) to the Advertiser for approval. Once all advertiser schedules are approved, the process of building a traffic schedule must take place. The T & B clerk will compile a complete list of all advertisers' schedules into one combined traffic schedule. The weekly traffic schedule and Ad Creative files will be sent to IB who will transmit the ads to the Guide equipped TV for display. To close the loop back to render invoices, IB will submit verification that the ads were sent to the insertor to be transmitted. Following the reconciliation of the schedules sent and the ads received at the inserters, the T & B clerk will create affidavits of proof of performance and invoices. Payments received on the invoices will be entered into the individual Account ledgers.

3.0 Requirements of the Traffic and Billing System

To fully support the advertising effort of Guide Plus+ and future guide products, the Traffic and Billing system will be required to support Five main functions: Account Maintenance, Creating an Avail Schedule, Scheduling Ads (Trafficking), Billing Activity and Management Analysis. Additionally, the system must allow security level and functional access by the operator to be password protected. The following sections will more clearly define each of these aspects.

3.1 Account Maintenance

3.1.1　The System must allow the T & B Clerk to set up an Account with the basic account information including:
- Client Company name; street address, city, state, zip; contact names (2); contact phone numbers (2); e-mail addresses (2), and client product type(s) (from product type table).
- Priority (Fixed, ROS 1, ROS 2, ROS 3, ROS 4, ROS 5)
- Pre-Emptable? (Y or N)
- Make Good? (Y or N)

3.1.2　Accounts must have entry fields to maintain historical **contact information** including date, time, rep, purpose, required follow-up, and notes of each contact. This information could be located in a standard contact management add-on module.

3.1.3　Once an account is set up, the Advertiser will have an Account Number or ID. The Next step will be to set up a **Contract** within an account. Advertisers may have multiple contracts or orders under a single account. The elements of a unique contract are as follows:
- Start Date and Stop Date (Month/Day/Year)
- Total Dollar Amount (e.g., $60,000)
- Total Number of Spots (e.g., 1200 spots @$50. each + 100 bonus spots @$0 each)
- Spot Cost (actual, average calculated)
- Agency and/or Rep Firm (From an editable list of Agencies)
- Account Executive (From editable list of Reps)
- Pre-Approved Traffic Schedule (Y or N) (This will determine if the advertiser will require regular approval of schedule throughout contract or if contract confirmation approval is sufficient)
- Contract Type (Standard, Trade, PSA/Promo, Co-op, Political)
- Affidavit type (full detail, minimal detail).

- Payment terms (i.e. Net 30, 10 days less 10%, equal monthly, etc.)
- Contract Remarks
  - P. O. Number
  - Status (Active, hold, inactive)
  - Tax ID (For tax exempt Advertisers)

3.1.4   It is possible for a single advertiser to have more than one contract running simultaneously. It is also possible that one advertiser may choose to set up separate accounts for different contracts to keep their own records separate. Each contract will have a PO associated with it from the advertiser.

         3.1.4.1   There must be a location to select a "bill to" address – especially if the account has an Agency and/or Rep firm associated with it. Bills may be sent to Client, Agency, or Rep Firm. Defaults should be as listed:

              3.1.4.1.1   Bill sent to client if there is only a client

              3.1.4.1.2   Bill sent to Agency if there is a client and agency.

              3.1.4.1.3   Bill sent to Rep Firm if there is a client, agency and rep firm.

         3.1.4.2   **Tax Rates** must be set up with the contract. If the tax rate for advertising is 5%, we must have the ability to add this (or omit this) as appropriate. We may need tax tables for this (unclear at this time). Also, tax-exempt (i.e. American Cancer Society?) will be charged 0%. The default should be 0(?).

         3.1.4.3   **Program Package Discounts** may be negotiated as a condition of the contracts. The ability to enter a XX.XX% discount to the spot cost or the overall purchase should be supported to allow the contract confirmation to be built based on the discount at the spot level as well as at the total package purchase level.

3.1.5   No charge Advertisers

         3.1.5.1   In-house, promotional ads will be trafficked through the system at no charge. Although there will be no receivable related to a no-charge, in-house campaign, it will use otherwise unsold inventory and must be tracked as an account.

         3.1.5.2   For this purpose, we will likely want to set up multiple "house" accounts that would be no-charge accounts.

         3.1.5.3   Other promotional campaigns may be trafficked for non-profit organizations at no charge. These are a different type of ad called a **PSA or Public Service Announcement**. Again, these accounts must be set up and their schedules trafficked the same as regular paying clients, but there will not be any dollars collected for these ads. Examples of these clients may be American Cancer Society (no/stop smoking ads), etc.

3.2 Client Detailed Advertising Strategy

3.2.1   Contracts will coincide with sales orders and will outline specific terms of the agreement for the advertising purchase. Those points will include total dollars that will be spent, the timeframe in which it will be spent (start date + end date), and the "strategy" which will be employed. Strategy Elements for each contract will include:

- Number of different Ad Creative Concepts/Scripts
- Type of ads (single panel, double panel, channel)
  - Position preference should be available if single panel or channel is selected.
  - Parent or fixed (if appropriate)
- Approved days of the week (M – Su)
- Number of Weeks during the term of the contract
- Maximum spots per day
- Minimum spots per day
- Approved Dayparts (from all dayparts available)
- Daypart Weighting (e.g., 100% Prime 3; 50% overnight + 50% daytime)

- From the dayparts selected, each can then be weighted. The default should be equal weighting.

3.2.1.1   Creative **Ad Copy Library**

3.2.1.1.1   Each Client will have their own "library" of Creative Ad Copy files from which to select copy for insertion. Each creative will have it's own unique ID number to be used for trafficking. Ads will be created in GOMaker, but the ID numbers must be maintained in the T & B system.

3.2.1.1.1.1   When a creative order is sent to a graphics artist for creating with GOMaker, the creative ID number will sent with the order.

3.2.1.1.2   system security preventing the T & B clerk from using X creative from Y Client's library.

3.3 Building a Contract Confirmation

3.3.1   Using the Information from the Contract and the Strategy, the T & B clerk will build a contract confirmation outlining line-by-line a schedule for the terms of the contract.

3.3.1.1   For each different creative, there will be a separate contract line.

3.3.1.1.1   Lines will display the following elements
- Client Priority (pre-filled from contract info)
- Make Good instructions (pre-filled from contract info)
- Zones (manual select from all zones, default will be "all")
- Type (manual select from all types for each line)
- Start Date (default to contract start date – must be editable within contract window)
- End Date (default to contract end date – must be editable within contract window)
- Start Time (approved dayparts should be pre-filled from strategy info and editable)
- End Time (approved dayparts should be pre-filled from strategy info and editable)
- Days Authorized (pre-filled from strategy info)
- Total Spots (manual add)
- Unit Cost (pre-filled from contract info and editable)
- Total Cost (calculated from above info)
- Ad Copy ID # (copy #'s will be issued as a part of each contract set-up and will need to be manually filled here)

3.3.1.1.2   Many items, as indicated above, will be pre-filled in the contract confirmation lines. Each line, however, should be editable by the T & B clerk until it conforms to all of the terms of the contract.

3.3.1.1.3   Each line within a contract confirmation must have a line ID #. This number will be used as a reference on both the weekly schedule as well as the reconciliation reports and invoices.

3.3.2   Once completed, the clerk should be able to print and mail the contract Confirmation to the Advertiser for approval.   When the client approves the contract confirmation, the contract will then be scheduled into the avail inventory.

3.4 Creating an Avail Inventory

3.4.1   Using the information listed in sections 1.4 – 1.10 of this document, an avail schedule must be built based on the following definition: Date+ space+ timeslot.

3.4.1.1   A Standard **Broadcast calendar** will be used.

3.4.1.1.1   Monday – Sunday

3.4.1.1.2   Weeks 1 – 52 (January 1 = week 1)

3.4.2   Avail Inventory Maintenance will be an administrative function that will happen on a routine basis. We anticipate that avails will change (e.g. slicing down some of the day parts into shorter time frames such as changing from 30 minutes to 10 minutes display) based on our

inventory needs. When these changes happen, previously scheduled ads must not be adversely affected.

    3.4.2.1   Routine maintenance will need a simple UI to modify the tables that drive the schedule. Avail maintenance should be a password-protected function, although it is anticipated that initially the T & B clerk will also perform the function of schedule maintenance.

    3.4.2.2   The Avail Inventory must be able to be maintained for a rolling year. This will allow annual purchasers to pre-plan their ad campaigns and expenses. It will also allow us to change pricing or make additional avail slots available as necessary.

3.5 Building an Individual Client Schedule

    3.5.1   Using the information previously entered in the contracts section and the Ad Avail sections of the system, the T & B clerk must now have the ability to schedule ad copy into the Avail Inventory on a client-by-client basis.

    3.5.2   It is anticipated that this process will be done on a Monday or Tuesday prior to the start of the next Broadcast week. For example, it is anticipated that for broadcast week 35, the schedule will be created on Monday or Tuesday during broadcast week 34.

        3.5.2.1   Once the schedules are complete, the T & B clerk will print and send a copy to the advertiser for approval (if required). If the schedule must be approved, it should be considered "pending" until approval is received. If the schedule does not need to be approved, it should be considered "final" when built.

    3.5.3   Initially, we anticipate that building an individual client schedule will be an entirely manual process. Once contract confirmation is entered into a database, only clients who have requested purchases during a particular broadcast week must be queried and printed in "priority" order.

    3.5.4   Using this report, the top priority client(s) will have their schedules built first using the open avails. Once this process is complete, the second priority clients' schedules will be built and so forth.

    3.5.5   Based on the pre-qualifiers specifically set forth in the contract section, the T & B system should only present an avail schedule that is relevant to each contract line.

        3.5.5.1   Specifically, this refers to single panel ad inventory versus double panel ad inventory versus channel inventory. If the T & B clerk is attempting to schedule all panel ads, only panel ad inventory should be presented to them.

           3.5.5.1.1   In future versions, the system should have two types of scheduling available to it: auto and manual.

               3.5.5.1.1.1   With Auto Scheduling, the system will know the criteria on a line by line basis for each contract and should be able to match those up with the available inventory giving first priority to the highest priority clients.

    3.5.6   Individual Ad Schedules will be built based on Advertiser Priority on a line by line basis. In order to accomplish this, all lines from every active contract must be selected from the database by Advertiser priority. Those with priority "Fixed" will be selected first and manually scheduled. Those with priority ROS 1 will be selected second and manually scheduled from what inventory remains. The ROS 2 lines will then be selected and schedule, etc., until all lines scheduled to run during for the week are scheduled in the available slots.

        3.5.6.1   Each line that is completely scheduled will need to be marked and no longer selected in the weekly scheduling process.

        3.5.6.2   Each line that is completely scheduled will then be entered into the advertiser's account ledger for reconciliation and billing.

           3.5.6.2.1   The T & B clerk will select from what is available to set up a schedule. Once selected, an avail will be "grayed out" or made unavailable for another advertiser.

3.5.6.2.2   Once a schedule status is deemed "final" (e.g., approved by the advertiser or pre-approved via the contract confirmation process), the avail will no longer appear as an option to select or even to be viewed.

3.5.7   When a schedule is built, the status of the schedule must be "pending" and forwarded to the advertiser for approval. Once all approvals are received, the schedule is changed to "final" and compiled for insertion into the main traffic schedule.

     3.5.7.1   The schedule will include "creative" copy that will be handled as a separate function with GOMaker. Because each line in the contract is driven by the "Creative" copy, the T & B system must have the ability to match up an advertiser approved GOMaker file to an advertiser approved schedule before the order is considered "final".

     3.5.7.2   When the original order is set up in the account, the T & B system will send the GOMaker artist a "creative" ID number to match up with the schedule. There may be multiple creative orders to match with multiple schedules to complete a full order. For example, NBC might want to spend 50% of their budget on *Friends* and 50% on *Dateline*. The order schedules would be created simultaneously, but there would be two separate creative orders for the schedule.

     3.5.7.3   The concepts of Unscheduling spots as well as exchanging creative or ad copy must be supported as well.

3.6 Building a Traffic Schedule

3.6.1   Once all individual schedules are built for the week, the result will be a complete traffic schedule for all advertisers.

3.6.2   Schedules are either pre-approved or require approval (based on contract driven parameters) If weekly schedules require approval, they must remain "pending" until the client submits approval.

3.6.3   A weekly traffic schedule must be "final" at some point (TBD – likely to be 1 – 3 days) prior to the beginning of the broadcast week, so all individual schedules must be either approved or cancelled by this closing date.

     3.6.3.1   Initially, this will certainly be a manual process. In future versions, it would be beneficial to have this completed automatically.

3.6.4   Although the traffic schedule will be completed on a weekly basis, IB will only transmit ads on a daily basis so only a daily traffic schedule will be sent to IB.

3.7 Reconciling Procedures

3.7.1   The ability to reconcile ad activity must be supported by the T & B system. Initially, this process will likely be relatively manual, but it should be a longer-term goal to automate the process where possible.

     3.7.1.1   Reports of ads received at the inserter sights must be retrieved and compared with the individual client schedules that were built.

         3.7.1.1.1   When ads are missed, the T & B clerk will have to set up a make-good for the advertiser's schedule or process a credit to their ledger.

         3.7.1.1.2   When ads are correctly trafficked, the T & B clerk will compile affidavits verifying proof of performance to send with invoices.

     3.7.1.2   This process, either manual or automated, will likely need to be done on a daily or weekly basis.

3.8 Billing Activities

3.8.1   Affidavits will be compiled from data received from the inserters as described in section 3.7.

     3.8.1.1   It is not anticipated that we will provide affidavits until version 2 of the T & B system.

         3.8.1.1.1   Affidavits will be a notarized document declaring that our records indicate an accurate account of our proof of ad performance (ads reached inserters) to the advertiser's approved schedule.

         3.8.1.1.2   Standard Affidavit reports will include Notary Information to speed processing following printing.

3.8.1.1.3   In version 2, the affidavit of performance will map directly to the invoices rendered to a client.

3.8.2   Invoices will be rendered monthly for each completed line of a contract.

3.8.2.1   Because the lines are "creative" driven for scheduling purposes, it is conceivable that we will want to ensure that no single line in a contract should exceed 30 days. That will allow the system to trigger a minimum of one invoice for each "active" contract during its term and will minimize large invoices.

3.8.2.2   Invoices will be rendered monthly and will be a request for payment for all ad spots run during the month based on the advertiser's approved schedule.

3.8.2.3   Invoices will list all charges, credits, adjustments, and other account activity that may have taken place during the processing month.

3.8.2.4   Invoices should have their own unique ID to be inserted into the advertiser's account ledger.

3.8.2.4.1   Posting payments

3.8.2.4.2   The process of posting payments will initially be manual and be completed by the clerk entering each account when a check/payment is received on an invoice.

3.8.2.4.3   The clerk will review the ledger of charges posted to the account and verify that the payment received is accurate to what was invoiced. The payment will then be applied to the account, which must result in updating the records to reflect this adjustment.

3.8.2.4.4   By version 2 of the T & B system, it would be useful to have a batch process where a number of payments could be entered to multiple accounts and applied simultaneously to speed the process.

3.8.3   Accounts Receivable Records must be kept on each Account.

3.8.3.1   On a per-contract basis, we will be sending invoices monthly and receiving payments routinely, so we will need to establish basic accounting functionality within the T & B system by version 2.

3.8.3.1.1   Each Account must contain a ledger which displays the following:
- Client Name
- Date Account Opened
- Account Executive
- Contract ID(s)
- Transaction Date(s) (Date A/R record(s) are posted to the account)
- Invoice ID (s)
- Transaction type (s) (Payment, Added Fees, Invoice, Adjustments, Agency Commission, etc.)
- Amount (s)
- Balance Due
- An Aging window (30+, 60+, 90+, 120+)

3.8.4   Account Reports

3.8.4.1   The T & B clerk should have the ability to run a number of queries on account activity. Such reports should include total amount of sales for the week, month, quarter by rep, account, agency, etc.

3.8.4.2   Queries may be run routinely to determine the status of orders. These reports will include how many (and how much $$) active accounts there are, how many schedules are not confirmed, and how many ads are awaiting approval on creative from the client. The T & B clerk must be pre-notified of all of these issues through a set of daily reports that are set up based on these and other business rules.

3.8.4.3   Account Activity/Form Status

3.8.4.3.1   The T & B system will create documentation that will leave the advertiser in various states. In order to accurately track the state of

each piece of "paper", the T & B system must have the ability to "set up" documents as "draft" or "final" as well as "approved" and "pending approval". A list of each of these components is included in a table in this document during the discussion of forms.

3.8.4.4   Forms

As outlined below, there are standard broadcasting advertising forms that must be created by the T & B system they are as follows in table 2 below:

Forms	Signed/Approved By Advertiser?	Signed/Approved By Gemstar?	Printable?	On-screen review?	Notarized?
Contract Confirmation	Yes	Yes	Yes	Yes	No
Weekly Schedule	Yes or pre-approved	No	Yes	Yes	No
Affidavit	No	Yes	Yes	No	Yes
Invoice	No	No	Yes	Yes	No

Table 2: Standard Broadcast Advertising Forms Required

3.9 Management Reporting Requirements

Eventually, extensive reporting functionality will be required of the T & B system. Reports will basically fall into three categories: A/R and Account reports, Open Avail Scheduling reports and Post-Air Reconciliation reports.

3.9.1   A/R and Account Reports will include all aspects of Receivable and aging. It is anticipated that we will want to also evaluate the effectiveness of sales by a number of variables including but not limited to sales/rep, sales/agency, sales/ advertiser, sales/space, sales/zone, sales/day part, etc.

3.9.2   Open Avail Scheduling reports will be tools that will give the T & B Clerk and sales Manager a look into sales % for planning purposes.

3.9.2.1   Additionally, as discussed in section 3.5 of this document, it will be necessary to run contract line reports (in Advertiser priority order) to effectively schedule spots into the avails.

3.9.3   Post-Air Reconciliation reports will allow an analysis of how effectively the inventory was managed and sold.

3.9.3.1   Reconciling schedules to "actual" will be first priority.

3.9.3.2   Secondary priority will include reports which can assist in the analysis of how much of the avail inventory was sold, how much revenue was generated, how much of the inventory was "given away" (as make-goods, in-house promos or Public Service Announcement promos), etc.

Appendix B:

Time Slice	Time Frame	AM/ PM	Standard Broadcast Dayparts	Guide+ Avail Dayparts	Time Displayed
1	5:45 - 6:14:59	A	Early Morning	**Early Morning**	3 hours
2	6:15 - 6:44:59	A	Early Morning	Early Morning	
3	6:45 - 7:14:59	A	Early Morning	Early Morning	
4	7:15 - 7:44:59	A	Early Morning	Early Morning	
5	7:45 - 8:14:59	A	Early Morning	Early Morning	
6	8:15 - 8:44:59	A	Early Morning	Early Morning	
7	8:45 - 9:14:59	A	Early Morning	**Morning**	3 hours
8	9:15 - 9:44:59	A	Daytime	Morning	
9	9:45 - 10:14:59	A	Daytime	Morning	
10	10:15 - 10:44:59	A	Daytime	Morning	
11	10:45 - 11:14:59	A	Daytime	Morning	
12	11:15 - 11:44:59	A	Daytime	Morning	
13	11:45 - 12:14:59	A	Daytime	**Daytime**	4.5 hours
14	12:15 - 12:44:59	P	Daytime	Daytime	
15	12:45 - 1:14:59	P	Daytime	Daytime	
16	1:15 - 1:44:59	P	Daytime	Daytime	
17	1:45 - 2:14:59	P	Daytime	Daytime	
18	2:15 - 2:44:59	P	Daytime	Daytime	
19	2:45 - 3:14:59	P	Daytime	Daytime	
20	3:15 - 3:44:59	P	Daytime	Daytime	
21	3:45 - 4:14:59	P	Daytime	Daytime	
22	4:15 - 4:44:59	P	Early Fringe	**Early Fringe**	2.5 hours
23	4:45 - 5:14:59	P	Early Fringe	Early Fringe	
24	5:15 - 5:44:59	P	Early News	Early Fringe	
25	5:45 - 6:14:59	P	Early News	Early Fringe	
26	6:15 - 6:44:59	P	Early News	Early Fringe	
27	6:45 - 7:14:59	P	Prime Access	**Access**	1 hour
28	7:15 - 7:44:59	P	Prime Access	Access	
29	7:45 - 8:14:59	P	Prime Time	**Prime 1**	.5 hour
30	8:15 - 8:44:59	P	Prime Time	**Prime 2**	.5 hour
31	8:45 - 9:14:59	P	Prime Time	**Prime 3**	.5 hour
32	9:15 - 9:44:59	P	Prime Time	**Prime 4**	.5 hour
33	9:45 - 10:14:59	P	Prime Time	**Prime 5**	.5 hour
34	10:15 - 10:44:59	P	Prime Time	**Prime 6**	.5 hour
35	10:45 - 11:14:59	P	Late News	**Late Fringe**	3 hours
36	11:15 - 11:44:59	P	Late Fringe	Late Fringe	
37	11:45 - 12:14:59	P	Late Fringe	Late Fringe	
38	12:15 - 12:44:59	A	Late Fringe	Late Fringe	
39	12:45 - 1:14:59	A	Late Fringe	Late Fringe	
40	1:15 - 1:44:59	A	Late Fringe	Late Fringe	
41	1:45 - 2:14:59	A	Overnight	**Overnight**	4 hours
42	2:15 - 2:44:59	A	Overnight	Overnight	
43	2:45 - 3:14:59	A	Overnight	Overnight	
44	3:15 - 3:44:59	A	Overnight	Overnight	
45	3:45 - 4:14:59	A	Overnight	Overnight	
46	4:15 - 4:44:59	A	Early Early Morning	Overnight	
47	4:45 - 5:14:59	A	Early Early Morning	Overnight	
48	5:15 - 5:44:59	A	Early Early Morning	Overnight	

Appendix C: Guide Plus+ Advertising Glossary

account executive: Syn. "AE", A salesperson responsible for ad sales and account management.

ad copy library: A selection of "active" ads that an advertiser has available for airing at any one time.

affidavit: A notarized record of commercials sent (to the inserter), listing ad date and time, provided to advertisers; also called an affidavit of performance.

availability/avail: The commercial position that is available for purchase to an advertiser.

broadcast: Any message that is transmitted over a large area, not necessarily by a broadcast station, is said to be broadcast. For example, transmitting Guide Plus+ data via VBI lines is considered broadcasting.

broadcast calendar: A full year beginning with the first Monday in January which marks the first broadcast week. There are 52 weeks in the broadcast calendar.

broadcast day: The period between the sign-on and sign-off of a radio or TV station. The first daypart for a broadcast day is early, early morning, which is typically 4:00 AM – 6:00 AM. Although we will be displaying ads 24 hours a day (like most TV broadcasters do today), we will recognize 6:00 AM to be the beginning of our Guide Plus+ broadcast day.

broadcast week: A full week beginning with the first broadcast daypart on Monday and ending on the last daypart on Sunday.

buy: A purchased advertisement schedule.

circulation: In print media, the number of copies sold or distributed by a publication. In broadcast, the number of homes owning a set within a station's coverage area. In outdoor, the number of people passing an advertisement who have an opportunity to view it. In Guide Plus+ parlance, the number of Guide Plus+ enabled televisions.

client: The person directly responsible for paying for and/or supervising a session, project, or other entity.

closing date: The date set for receipt of material for an ad to appear in a forthcoming broadcast week. In Guide Plus+ terms, it will be the final date for ad creative and ad schedules to be approved by the client. Syn. "closing date".

commercial pool: A selection of television or radio commercials that an advertiser has available for airing at any one time. In Guide Plus+ terms, this will be the "active" ad copy library.

confirmation: A standard form used in Broadcasting to confirm the terms of an advertising contract and the strategy for deployment of a schedule. The confirmation also includes the estimated monthly charges that the advertiser will incur during the term of the contract.

daypart: A programming segment of a broadcast schedule, such as morning, afternoon, early, and late fringe for television.

fixed position: In broadcast, a commercial unit purchased with non-preemption guarantees.

flight: An advertising campaign that runs for a specific period such as four weeks. May also be the duration of the contract.

GOMaker: A paste-up tool that is used to create ads for display on Guide Plus+ equipped TVs.

hiatus: A period of non-activity.

inventory: Avail structure defined.

lines: Contract terms defined in a contract confirmation document. Each line represents specific traffic instructions for each creative for the term of the contract.

makegood: In broadcast, a commercial position given free in lieu of the announcement missed due to the fault of the broadcaster.

network promo: An announcement broadcast by a network to promote a specific program or the network itself. Also known as a promo.

package: A combination of spots offered to an advertiser as a unit, usually at a discount.

picture-in-picture (PIP or P.I.P.): A feature of television sets in which the viewer can see program inside a small window on the screen while watching another program on the same screen.

preempt: To replace a regularly scheduled program or commercial. A *pre-emptable* may be sold by a radio or TV station at a reduced rate (*pre-emptable rate*); the program or commercial is subject to cancellation prior to broadcast if another advertiser pays a higher rate.

public service announcement (PSA): A no-charge or significantly reduced charge ad that is run for a non-profit organization.

rate card: A pamphlet, brochure, or single sheet of paper that states the costs for advertising on or in an advertising vehicle as well as other pertinent information relating to the vehicle, (e.g., circulation, mechanical requirements, etc.)

reconciling: The process of comparing the traffic reports with the inserter reports for variances. Spots scheduled but not displayed must be processed back into the schedule for a *make-good (no charge re-run)* or refunded to the advertiser in the form of a credit.

rotation: In Guide Plus+, a pre-defined position of an ad within a schedule. Ad slots can have multiple rotations (we will begin with 4) that will display different ads each time the user exits and re-enters the Guide within the same avail time slot. For example, if there are 4 ads in a slot rotation, the user will be presented with ad A on their first entry into the Guide and will see ad B on their second entry and so forth. Rotations for this example can be either random or fixed. We will begin using fixed rotations.

run of schedule (ROS): An instruction to broadcast a commercial anytime during a broadcaster's schedule. ROS schedules can also be prioritized with ROS 1 schedules having higher priority than ROS 5 schedules.

sales department: The department that solicits and accepts advertising.

slot: The location of a program, announcement, news item, interview, or commercial on a broadcast schedule. In Guide Plus+, a slot is the physical position on the screen where the first level ad will appear. There are three slots for Panel Ads (top, bottom and both combined) and nine slots for Channel Ads (each of the channel slots on a Grid can be used for a Channel Ad).

spots: Refers to TV commercial announcements. In Guide Plus+ terms, a spot is synonymous with an ad or ad copy.

time: The period available for a an advertisement. A *time buyer* purchases broadcast time, perhaps with a *time contract* and at a *time discount*, a reduced price for quantity and/or frequency, from a *time card* that indicates a different *time charge* for each *time class* or *time slot* (a specific time period such as prime time or overnight).

time slot: A specific period in a schedule such as prime time or overnight.

trade: The acquisition of quantities of commercial time from broadcast stations in exchange for equal value or advertising. For example, NBC might provide advertising time to Gemstar to promote Gemstar products (Guide Plus+, VCR Plus+, etc.) on its network in exchange for equal amounts of advertising time on Gemstar products (e.g., Guide Plus+ panel ad space promoting NBC shows). Generally, no money is exchanged in trade advertising, but affidavits as proof of performance are exchanged.

zone: An area of coverage where all people see the same commercials. We define a zone as a region within a DMA.